

**ABSTRACT OF THE DISCLOSURE**

It is an object of the present invention to obtain a containment concrete cask which has heat removal capacity maintained at the conventional level or beyond it and which prevents radiation from leaking to the outside. In a concrete cask, a shielding body composed of concrete and heat transfer fins made from metal are provided between an inner shell and an outer shell made from metal, and an accommodation portion for accommodating a radioactive substance is provided inside the inner shell. The accommodation portion has a containment structure to be insulated from the outside of the cask. In the heat transfer fins, the portions thereof at the outer shellside are provided in contact with the outer shell and the portions thereof at the inner shell side are cut so as to form a separation portion with respect to the inner shell.